

Daniel Hinz - FW: BPL interference to amateur operation

From: "James Burtle" <James.Burtle@fcc.gov>
To: <timvanweelden@alliantenergy.com>
Date: 06/01/2004 1:13 PM
Subject: FW: BPL interference to amateur operation

-----Original Message-----

From: Rick Sellers [mailto:memorick@kmryradio.com]
Sent: Monday, May 17, 2004 4:16 PM
To: James Burtle
Subject: BPL interference to amateur operation

This is a copy of letter sent to Cedar Rapids, Iowa electric utility Alliant Energy.
Thanks for your attention and involvement in this matter.

Rick Sellers

May 10, 2004

Mr. Tim VanWeelden
Alliant Energy
1001 Shaver Rd. NE
Cedar Rapids, IA 52402
E-mail: timvanweelden@alliantenergy.com

Dear Mr. VanWeelden:

I am writing to inform you that your BPL test installation on Glass Rd. NE in Cedar Rapids is causing harmful interference to my licensed Amateur Radio station. This interference is found on 40, 30, 17, 15, 12 and 10 meter amateur bands and makes normal communications on these frequencies difficult. The harmful interference started in late March or early April and continues to this day.

BPL is classified as an intentional emitter in Part 15 of the FCC Regulations and is prohibited from interfering with other FCC licensed services. As the operator of this BPL system it is Alliant Energy's responsibility (as outlined in Part 15 of the FCC Regulations), to eliminate the interference being caused to services licensed by the FCC, including the Amateur Radio service.

Therefore, I am requesting that Alliant Energy, as operator of this BPL system, eliminate the interference caused by the BPL system. If Alliant Energy is not able to eliminate this interference ~~at once~~, Alliant Energy should immediately shut down the BPL system.

The harmful interference to my station for a single day is documented in the attached report.

Yours truly,

Richard L. Sellers, WD0HGI
(and licensee of commercial AM Radio Station KMRY)
2900 Glass Road NE
Cedar Rapids, Iowa 52402
Email: r.sellers@kmryradio.com

Cc:

Federal Communications Technology
Office of Engineering and Technology
Attn: Anh Wride
Room 7-A825 Portals II
445 12th Street SW
Washington, DC 20024
Email: awride@fcc.gov

Federal Communications Commission
Attn: Alan R. Stillwell
Room 7-C210
445 12th Street SW
Washington, DC 20024
Email: astillwe@fcc.gov

Federal Communications Commission
Attn: Riley Hollingsworth
1270 Fairfield Road
Gettysburg, PA 17325
Email: rholling@fcc.gov

Federal Communications Commission
James R. Burtie
Chief, Experimental Licensing Branch
Room 7-A267
445 12th Street SW
Washington, DC 20024
E-mail: jburtie@fcc.gov

Ed Hare W1RFI
American Radio Relay League
225 Main Street
Newington, CT 06111
e-mail: ehare@arri.org

Report of Harmful Interference from a Broadband Over Power Line Trial

Name of complainant: Richard L. Sellers

Call sign: WD0HGI

Station location: 2900 Glass NE, Cedar Rapids, Iowa 52402

Telephone: 319-393-0196

E-mail: r.sellers@KMRYRadio.com

Description of Interference: Closely spaced strong carriers with some modulation. These across wide portions of the affected amateur bands. Some carriers turn on and off.

Description of station: Icom IC-728 Transceiver, Nye-Viking Antenna coupler

Antenna type: All-band center-fed horizontal wire, 165 feet on a side. Approximately 35 feet in the air.

Antenna location: Antenna runs North-South from the front to the back of the lot.

Distance of antenna from own house (feet): The center of the antenna is directly over the house.

Distance of antenna from neighboring houses (feet): approximately 70 feet

Distance of antenna from power distribution line or equipment (feet): Perpendicular to and 65 feet from power line.

Log of interference

Date: 5-8-04

Time 5:00 to 5:50 PM

This interference consists of many closely spaced carriers.

Frequency: 40 meters (7.0 to 7.3 MHz) Mode: CW/SSB
Interfering Signal Strength: S7

Frequency: 30 meters (10.1 to 10.150 MHz) Mode: CW
Interfering Signal Strength: S7

Frequency: 20 meters (14.0 to 14.350 MHz) Mode: CW/SSB
Interfering Signal Strength: Others have reported interference on the 20 meter band.
When I took the data on 5-8-04 there was an extremely loud noise which would mask any BPL interference.

Frequency: 17 meters (18.068 to 18.168 MHz) Mode: CW/SSB
Interfering Signal Strength: BPL signals at the S7 noise level

Frequency: 15 meters (21.0 to 21.450 MHz) Mode: CW/SSB
Interfering signal Strength: S6

Frequency: 12 meters (24.890 to 24.990 MHz) Mode: CW/SSB
Interfering Signal Strength: S9

Frequency: 10 meters (28.0 to 28.4 MHz) Mode: CW/SSB
Interfering Signal Strength: S3 to S4

R. J. Hirvela
3613 Heatheridge Drive NE
Cedar Rapids, Iowa 52402

Mr. Tim VanWeelden
Alliant Energy
1001 Shaver Rd. NE
Cedar Rapids, IA 52402

May 27, 2004

Dear Mr. VanWeelden:

The purpose of this letter is to inform you that your BPL test installation near my home at 3613 Heatheridge Dr NE, on the corner with Glass Road, appears to cause considerable interference on the 15 Meter amateur radio service band.

On May 9, 2004, between 8 PM and 9 PM, I measured and videotape recorded interference levels of approximately S-7 across the entire band. The interference appeared as a series of tones spaced a few kilohertz apart.

As I hold an FCC Advanced Class Amateur Radio Station License for this location, the BPL system clearly interferes with FCC licensed services. The enclosed report provides additional details.

If you require any additional information please contact me at 319-363-8437.

Thank you.

Sincerely,



Cc:

Federal Communications Technology
Office of Engineering and Technology
Attn: Anh Wride
Room 7-A825 Portals II
445 12th Street SW
Washington, DC 20024

Report of Harmful Interference from a Broadband Over Power Line Trial

Name of Complainant: Robert J. Hirvela

Call Sign: AK0D

Station Location: 3613 Heatheridge Drive NE, Cedar Rapids, IA 52402

Telephone: 319-363-8437

E-Mail: rihirvela@compuserve.com

Description of Interference: Series of modulated tones spaced a few kilohertz apart

Description of Station: Rockwell-Collins KWM-380 Transceiver

Antenna Type: 40 ft. Multi-band center-fed dipole (Alpha Delta Model DX-EE)
Approximately 20 feet in the air

Antenna Location: Antenna runs approximately North-South at rear of house

Distance of antenna from own house (feet): Directly above

Distance of antenna from neighboring house (feet): Approximately 75 feet

Distance of antenna from power distribution line or equipment (feet):
Perpendicular to and approximately 80 feet from the power line.

Log of Interference:

Date: May 9, 2004

Time: 8 PM to 9 PM

The interference consists of a series of modulated tones across the entire 15-meter band

Frequency: 21.0 to 21.450 MHZ

Interfering Signal Strength S-7

Daniel Hinz - BPL Interference Levels 6-4-04

From: "Jim Spencer" <jlscr@mchsi.com>
To: "Daniel Hinz" <danielhinz@alliantenergy.com>, "Jerry Koppenhaver" <JerryKoppenhaver@alliantenergy.com>, "Tim VanWeelden" <timvanweelden@alliantenergy.com>
Date: 06/04/2004 3:04 PM
Subject: BPL Interference Levels 6-4-04
CC: "Wade Walstrom" <Walstrom@mchsi.com>, "Dave Sumner" <dsumner@arri.org>, "Ed Hare W1RFI" <W1RFI@arri.org>

Gentlemen,

As a follow-up to my telephone conversation with Dan this morning, I have completed a scan for BPL interference at my home. Dan told me that they had not changed the notching configuration since last Friday and that everything was the same as when I last reported on June 1. I told him that there were significant differences at my house and that it had been changed or something had failed.

Compare this data with that sent on June 1 and it clear that the interference has been moved out of all the amateur bands above 30 meters.

This afternoon between 1:20 and 2:15 PM I checked all amateur bands from 160 meters to 10 meters.

My band by band observations:

160 meters (1.8 to 2.0 MHz): No BPL observed in S9 + 20 db power-line noise.

80 meters (3.5 to 4.0 MHz): No BPL observed in S9 + 5 db power-line noise.

40 meters (7.0 to 7.3 MHz): BPL signals over the entire band, S8 to S9. Power-line noise S8.

30 meters (10.1 to 10.150 MHz): BPL signals over the entire band, S8. Power-line noise S7.

20 meters (14.0 to 14.350 MHz): No BPL signals. Power-line noise S8.

17 meters (18.068 to 18.168 MHz): No BPL signals. Power-line noise S4.

15 meters (21.0 to 21.45 MHz): No BPL signals. Power-line noise S1.

12 meters (24.89 to 24.99 MHz): No BPL signals. Power-line noise S0.

10 meters (28.0 to 29.7 MHz): No BPL signals. S0 power-line noise.

This is certainly progress. Five amateur bands are not receiving interference with this notching configuration although the interference is still extremely bad on 30 and 40 meters. However, a shortwave listener might not be so happy!

If the BPL system is working, where are the other BPL spectrums? To find the answer to that question I did two frequency scans:

1. 2 to 30 MHz using my Icom IC-765 with various antennas (actually none match the out of band well)
2. 30 to 110 MHz using a Wandel & Goltermann SPM-17

Loud BPL signals were found in two major ranges:

1. 5.6 to 6.6 MHz was full of BPL as was 8.2 to 8.7 MHz, 9.3 to 11.0 MHz and 12 to 12.2 MHz. In the noise it was hard to determine the full range of the BPL signals but they certainly were loud in those areas.
2. 30.8 to 41.0 MHz also had many loud BPL signals.

When you find out the past and current notching frequency ranges, please pass them along. I would like to correlate the notching with what I'm observing here at the station. That information should also be useful to you.

If I can help your evaluation in any other way, please let me know. As I've offered before, I would welcome any or all of you to my station to observe BPL firsthand.

Sincerely, Jim Spencer



NEBRASKA CENTER FOR EXCELLENCE IN ELECTRONICS

4740 Discovery Drive
Lincoln, NE 68521
402-472-5880

8 June 2004

Jim Cnossen
Alliant Energy
1204 11th Street SW
Cedar Rapids, IA 52404

Re: Amperion Access BPL testing

Dear Jim:

This letter is to update you on the status of the testing performed by NCEE at your test site in Cedar Rapids, IA. Preliminary results would indicate that the system as tested the week of April 12th 2004 on Glass Rd NE is in compliance with the present FCC rules for Access BPL systems. The formal report with the official results should be completed shortly.

Regards,

A handwritten signature in black ink, appearing to read "Doug Kramer", written in a cursive style.

Doug Kramer
Senior Test Engineer
NCEE

Tim VanWeelden
Alliant Energy
1001 Shaver Road NE
Cedar Rapid, IA 52402

Dear Mr. VanWeelden:

BPL has been a topic of discussion for some time on the Amateur Radio bands. Hearing many negative reports on the interference it causes in the HF frequencies that the Amateur Radio operators use, I decided to do some listening on some of the Amateur Radio bands that I use.

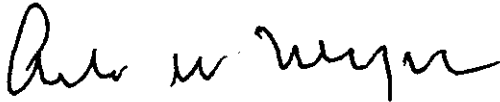
Knowing that Alliant was conducting tests using the Amperion BPL system I installed an ICOM 706 Mark IIG transceiver in my car and drove to the Glass Road Area where Alliant had the system installed. I was certainly surprised to find the amount of noise that was being generated by the system!

The interference to the 20, 15 and 10 meter bands was certainly way above the limits that are allowed by a Part 15 device of the FCC Regulations.

I would appreciate your cooperation in complying with the FCC Regulations by not installing a BPL system that does not meet the Part 15 requirements.

Please call me if I can answer any questions you may have about my findings.

Very Truly Yours,



Arlo W. Meyer WØLBK
7461 Commune Court
Cedar Rapids, IA 52411-8017

Telephone: 393-7461

Daniel Hinz - FW: BPL

From: "James Burtie" <James.Burtie@fcc.gov>
To: <timvanweelden@alliantenergy.com>
Date: 06/01/2004 1:13 PM
Subject: FW: BPL

-----Original Message-----

From: Arlo W Meyer [mailto:w0lbk@juno.com]
Sent: Thursday, May 27, 2004 6:09 PM
To: Anh Wide; Alan Stillwell; Riley Hollingsworth; James Burtie
Cc: ehare@arri.org
Subject: Fw: BPL

Below is a copy of a letter that I sent to Senator Grassley.

Dear Senator Grassley:

BPL has been a topic of discussion for some time on the Amateur Radio bands. Hearing many negative reports on the interference it causes in the HF frequencies that the Amateur Radio operators use, I decided to do some listening on some of the Amateur bands that I use.

Knowing that Alliant Energy was conducting tests using the Amperion BPL system I installed an ICOM Mark II G in my car and drove to the Glass Road area where the Amperion test system was installed. I was certainly surprised to find the amount of noise being generated by the system.

The interference to the 20, 15 and 10 meter bands was certainly way above the limits that are allowed by a Part 15 of the FCC Regulations.

I would appreciate your reviewing the requirements of the BPL system under test and not allowing the installation of this system in the Cedar Rapids, IA area.

Please contact me if I can answer any questions you may have of my findings.

Very truly yours,

Arlo W. Meyer W0LBK
7461 Commune Ct.
Cedar Rapids, Ia 52411-8017

Daniel Hinz - FW: Harmful Interference from BPL

From: "James Burtie" <James.Burtie@fcc.gov>
To: <timvanweelden@alliantenergy.com>
Date: 06/01/2004 1:15 PM
Subject: FW: Harmful Interference from BPL

-----Original Message-----

From: Jim Spencer [mailto:jlsr@mchsl.com]
Sent: Thursday, April 22, 2004 10:40 AM
To: Tim VanWeelden
Cc: Riley Hollingsworth; Alan Stillwell; Anh Wride; James Burtie; Ed Hare W1RFI
Subject: Harmful Interference from BPL

Tim VanWeelden
Alliant Energy
1001 Shaver Rd. NE
Cedar Rapids, IA 52402

Dear Tim:

Thank you for allowing me to participate in your test of the Amperion BPL system in NE Cedar Rapids. My location, station quality and experience as an electrical engineer for over 40 years and Amateur Radio operator for over 50 years has yielded very worthwhile information about the effects of a possible BPL deployment on other services using the High Frequency bands.

Your BPL installation is causing extremely harmful interference to my station on most amateur frequency bands and it makes normal communication impossible. BPL, a Part 15 device as defined in the FCC Regulations, is prohibited from interfering with other services licensed by the FCC. Now that your tests are completed, I ask that you correct the interference immediately or shut down the BPL system per Part 15 of the Regulations.

I started receiving serious levels of interference on March 30 when your BPL equipment was first installed. It has continued 24 hours a day since the 30th except for a few test shut downs. I have confirmed the interfering frequencies with Tom Luecke of Amperion. I've also demonstrated the problem to Alliant employees. Alliant and the Nebraska Center for Excellence in Electronics visited my station on April to record BPL levels. They were able to observe the strong levels of interference and to note that when the BPL was shut down, all of this interference disappeared.

The Amperion representative has provided me with a listing of the amateur frequency bands which he had notched when the system was installed. This includes the 20, 17, 15, 12 and 10 meter bands. However, I'm still receiving significant interference in those amateur bands and additionally in the 30 and 40 meter bands. The notching is ineffective in alleviating the harmful interference that I'm experiencing.

I again offer to demonstrate to any in Alliant management, or other Alliant employees, the extreme interference caused by BPL to my licensed Amateur Radio operation. I've also offered to help run susceptibility tests to determine what impact operation of a licensed Amateur Radio station might have on a customer using BPL for an Internet connection.

Below, in a standardized format prepared by the American Radio Relay League, is a report on the harmful interference I am receiving . I can supply more details on the interference or actual recordings if that would be helpful.

Sincerely,

James L. Spencer

Report of Harmful Interference from a Broadband Over Power Line Trial

Name of complainant: James L. Spencer

Call sign : W0SR

Station location: 3712 Tanager Dr. NE, Cedar Rapids, Iowa 52402

Telephone: 319-393-7353

Email: jlsr2@yahoo.com

Description of Interference: Extremely strong carriers with some modulation occurring throughout the amateur bands, often occurring less than every 2 KHz. The frequencies shift some with time but are generally on the low end of the 10 meter band, throughout the 12, 15, 17 and 40 meter bands. Interference can on the 20 and 30 meter bands seems to change although at times has been extremely strong.

Description of station: Icom IC-765, Icom IC-735, Kenwood TL-922A Power Amplifier (1000 watts), Alpha 76 PA Power Amplifier (1500 watts)

Receiver(s) affected: IC-765, IC-735

Antenna type: 1. TH7DXX rotary beam; 2. Inverted Vee's for 75 and 40 meters; 3. HF-2V Vertical for 80 and 40 meters; 4. rotary dipole for 30, 17 and 12 meters; 5. Inverted L for 160 meters

Antenna location: Tower is located about 80 feet from street in backyard.

Distance of antenna from own house (feet): 4 feet

Distance of antenna from neighboring houses (feet): approximately 30 feet

Distance of antenna from power distribution line or equipment: Antenna is about 50 feet from distribution line, about 500 feet from nearest BPL unit.

Log of interference

I have picked one typical day for this report although I've recorded information for many days. This

interference is on full time as I stated above.

Date : 4-17-04

Time 10:50 to 11:22 AM

The interference consists of carriers spaced approximately every 2 KHz. as noted above.

Frequency: 40 meters (7.0 to 7.3 MHz) Mode: CW/SSB Interfering Signal Strength: S8 to S9

Frequency: 30 meters (10.1 to 10.150 MHz) Mode: CW Interfering Signal Strength: S6 to S8

Frequency: 20 meters (14.0 to 14.350 MHz) Mode: CW/SSB Interfering Signal Strength: S5 to S7

Frequency: 17 meters (18.068 to 18.168 MHz) Mode: CW/SSB Interfering Signal Strength: S9

Frequency: 15 meters (21.0 to 21.450 MHz) Mode: CW/SSB Interfering signal Strength: S8 to S9

Frequency: 12 meters (24.890 to 24.990 MHz) Mode: CW/SSB Interfering Signal Strength: S7 to S9

Frequency: 10 meters (28.0 to 28.4 MHz) Mode: CW/SSB Interfering Signal Strength: S7 to S8

Mr. Tim Van Weelden
Alliant Energy
1001 Shaver Road NE
Cedar Rapids, IA 52402

30 May 2004

Dear Mr. Van Weelden:

I have been an active ham operator for more than 50 years, operating all HF bands plus 2m and 70cm, both fixed station and mobile. My equipment ranges from home-built to Collins KWM-380 to ICOM 706MKIIG, using a variety of antennas. About 2/3 of my operating time is mobile, as I do a lot of driving, and about half of that is on the HF bands.

Most hams I know have a concern about the impact of BPL on their ability to continue operation in the HF bands, myself included. When I heard Alliant was going to test an Amperion system in Cedar Rapids, I decided to drive over and see for myself how bad it was. It was even worse than I had heard! On May 20, around noon, in the vicinity of Glass Road and Amber, I recorded the following BPL interfering signals:

Band	S-Meter	Comments
40m	5-7	Every kHz or so, over the entire band
30m	5-6	Entire band
20M	3-4	Every 10-15 kHz; 14356 was S-5
17m	5-6	Entire band
15m	7-8	From 21,250 on up
12m	5	
10m	2-5	All over low end from 28029+; a few found S-7 to S-8

As I drove away from the area, I was listening on 15m -- the BPL diminished, but never quite into the noise level. Then, 2 blocks away, as I passed another overhead power line, it increased to S-6 on 21263 MHz. I have no doubt the adjacent houses would hear the same or worse. I am told this system has already had one round of "tailoring" to "protect" the amateurs.

The present environment for mobile operation has an appalling number of places where operation is impossible due to man-made interference, but at least I can drive to a different area (except for emergency communications!). Part of the reason I built a new home in the country was to get away from such interference for my fixed station operation.

If this system becomes widespread, no urban area will be free of this HF interference, and as I am an Alliant customer, you have the potential of delivering it right to my door! The Part 15 radiation limits are clearly inadequate, even if enforced. This technology is nothing less than deliberate pollution at the expense of other licensed services. I urge you not to do this!

Sincerely yours,

cc: Federal Communications Commission
Attn: Alan R. Stillwell, Room 7-C210
445 12th St SW
Washington, DC 20024

ARRL RFI Desk
225 Main St.,
Newington, CT 06111.

R L Kittrell

Richard L. Kittrell WØRFX
169 Fairview Road
Springville, Iowa 52336-9227

Amateur Radio W00F
3951 Sally Drive NE
Cedar Rapids IA 52402-2670
Telephone: 319/378-3141
2,475 feet from BPL Test Site
May 11, 2004

Mr. Tim VanWeelden
Alliant Energy
1001 Shaver Road NE
Cedar Rapids IA 52402

Dear Mr. VanWeelden:

Recently your firm began testing the Amperion BPL system. I have three reasons to encourage you to forego this system to get high speed data service to your clients. First, as an investor in electric utilities for 44 years and Alliant or predecessors for seven years, I believe the resources of labor and money could be much better spent improving and keeping up your primary business, namely as an electric power supplier and distributor.

Secondly, as a short wave broadcast listener and thirdly, as a radio amateur specializing in contacts with small and/or overseas stations that have signals of very low magnitude (often 0.08 microvolts), I'm concerned that even a moderate scale installation of BPL repeating equipment will multiply the present interference with my listening and two-way operations. Presently I am being interfered with by BPL signals of some 8 to 12 microvolts from 7241.27 kilohertz to 7307.87 KHz in the 41 meter foreign broadcast band.

My two-way amateur operations are being interfered with by BPL signals of some 2 to 3 microvolts from 21,116.252 KHz to 21,406.161 KHz.

If you should put in more of these Amperion BPL repeaters to carry data down longer 4160 volt lines, the injection voltages will have to be increased to get 100% copy on data to the last repeater or 802.11b "Wi-Fi" 2.4 GHz transmitter, and this will cause more radiation from the lines and more interference. There is a strong possibility these signals will skip for hundred, even thousands of miles. I know this from personal experience that a very low power transmitter on 7, 14 or 21 MHz, having about same field strength at 1/4 mile as your BPL repeater does at 2,475 feet, can have confirmed "hearings" and two-way contacts with every US state and a few overseas countries.

I would like to respectfully suggest you consider fiber optic to your 2.4 GHz transmitters. That should be much more reliable in passing data to the last link before being relayed via 2.4 GHz to clients' homes.

I'm writing this a bit late because until our recent rains, the horrible power line noise buried any noises the BPL repeaters made. This is where your time and money should be spent because equipment that causes noise on short wave frequencies often burns out at a later date when the temperatures are extreme or lightning strikes occur nearby. I was a power line noise locator and carrier current technician for Black Hills Power and Light of Rapid City, South Dakota, before my Naval service, and rather than just complaining, I'm willing to spend time and gasoline in my vehicle or yours to find and identify these noisy loose hardwares in dry weather, cracked insulators, fuse blocks and lightning arrestors and insulators that have a smear of lead or iron from BB's or shot pellets. Then you need to repair, tighten or replace the faulty component rather than following the "if it ain't burned out, don't fix it" philosophy.

I thank you for your consideration in this matter, and am looking forward to hearing modest signals again.

Sincerely,

William D. Snyder

William D. Snyder, W0OF

James Burtie

From: James Burtie
Sent: Friday, June 04, 2004 10:17 AM
To: 'timvanweelden@alliantenergy.com'
Subject: Request your FAX number

Mr. VanWeelden,

This is Jim Burtie of the FCC again. I would like you FAX number if you have one in the event that I receive IX complaints on paper. That would enable me to avoid mail delays when forwarding the complaints to you. My number is (202) 418-2445. You may respond with e-mail or on the phone.

Thanks,

Jim Burtie
Chief Experimental Licensing Branch
Office of Engineering and Technology
Federal Communications Commission

Alliant energy
800 255 4268

Left message 5/19/04 - need to know
who to send complaint to.

James Burtie

From: Timothy Van Weelden
Sent: Friday, June 04, 2004 3:00 PM
To: James Burtie
Subject: Re: Request your FAX number
My fax number is 319-786-1959.

Thanks

Tim Van Weelden
Customer Service Manager
86-1934

>> "James Burtie" <James.Burtie@fcc.gov> 06/04/04 09:17AM >>>

Jr. VanWeelden,

This is Jim Burtie of the FCC again. I would like your FAX number if you have one in the event that I receive IX complaints on paper. That would enable me to avoid mail delays when forwarding the complaints to you. My number is (202) 418-2445. You may respond with e-mail or on the phone.

Thanks,

Jim Burtie
Chief Experimental Licensing Branch
Office of Engineering and Technology
Federal Communications Commission

5/4/2004

Alliant

Alan Stillwell

From: Anh Wride
Sent: Wednesday, April 21, 2004 11:15 AM
To: Alan Stillwell; James Burtle; Alan Scrim; William Hurst; Bruce Franca
Subject: FW: Question

info on the labeling status of the BPL equipment in the NC trial, alleged to have no labeling.

-----Original Message-----

From: Gerrett Durling [mailto:gdurling@amperion.com]
Sent: Wed 4/21/2004 11:08 AM
To: Anh Wride
Cc: Steve Greene
Subject: RE: Question

Hello Anh, Regarding your question below, our products are marked as required. These labels are not visible after installation in underground installations as a user supplied outer enclosure is employed. They are visible on overhead installations but will not be legible over 30 feet in the air. Let me know if you have further questions.

Best Regards,
 Gerrett Durling
 Principal Regulatory Engineer
 Amperion Inc.
 978-824-2026
 978-659-0080 (fax)

-----Original Message-----

From: Anh Wride [mailto:Anh.Wride@fcc.gov]
Sent: Mon 4/19/2004 10:32 AM
To: Steve Greene
Cc:
Subject: Question

Hi Steve:
 Could you let me know if your equipment as part of the Progress Energy experimental deployment in North Carolina is properly labeled according to 47 CFR 2.954 and 15.19? Thanks!

Anh Wride
 Senior Engineer
 FCC OET/PRD

4/26/2004

William Snyder
3951 Sally Drive NE
Cedar Rapids IA 52402-2670
(319)378-3141
May 11, 2004

Federal Communications Commission
James R. Burtle
Chief, Experimental Licensing Branch
Room 7-A267
445 12th Street SW
Washington DC 20024

Dear Mr. Burtle:

I wish to register a complaint about two types of interference caused by equipment under the control of Alliant Energy of Cedar Rapids, Iowa. I have also informed Mr. Tim VanWeelden of Alliant Energy at 1001 Shaver Road NE, Cedar Rapids IA 52402.

- 1A. BPL Signals spaced about every 1111 Hertz from 7241.27 to 7307.87 KHz interfering with my communicating with low power amateur stations and hearing certain foreign broadcast stations well. These signals are from 8 to 12 microvolts in strength whereas the desired stations are from 1 to 10 microvolts (at 50 ohms impedance).
- 1B. BPL Signals also spaced about 1111 Hertz apart from 21,116.252 KHz to 21,406.161 KHz of strength 2 to 3 microvolts interfering with amateur stations from 0.08 to 2 microvolts. The BPL Signals originate from Amperion type repeaters on a 4160 volt line 2,475 feet from my station. I'm sure that if my antenna were horizontally polarized, these BPL signals would be much stronger.
2. One hundred-twenty cycle hums, buzzes and sometimes arcing sounds from loose hardware and faulty insulators and other problems types unknown that vary with the weather. The noise is always bad on 3.5 MHz and generally bad (over 15 microvolts) on 7, 10 and 14 MHz amateur bands.

The noise is at its worst along the 34.5 KV transmission lines from near Alliant Energy's maintenance and warehouse area on Shaver Road NE to the water purification plant also on Shaver Road NE, up the hill into the residential areas on Wenig Road NE to Glass Road and north, branching to cross Tanager Drive and on to a western part of Glass Road to Blue Jay Drive. Some noise is carried some two miles from the light industrial area and others originate on the 34.5 KV line some 150 feet east of Wenig Road NE and north of Glass Road which is residential. These closer lines are some 1,650 to 2,475 feet from my station.

Many days the noise is severe enough on my Delco car radio to nearly wipe out KXEL, a 50KW AM station on 1540 KHz 35 miles away at Dysart, Iowa, (studio at Waterloo), WHO, a 50KW AM clear channel station on 1040 KHz near Des Moines, Iowa, 105 miles distant and WSUI, the University of Iowa AM station 5KW on 910 KHz, 27 miles distant. This interference is at its worst along Wenig Road, some three miles of it, and one of my most used routes to downtown Cedar Rapids.

I am late in reporting the BPL interference because the line noise masked over it until our rains the last few days.

Unofficially, it seems as if Alliant doesn't want to devote resources to fixing faulty line equipment until something burns out from a voltage surge or extreme temperatures.

I believe I qualify as an experienced observer of these problems since I have been a shortwave broadcast listener for 65 years and into amateur radio since 1948; former holder of FCC 1st Class Radiotelephone operators license, and former Navy electronics technician 1st Class. I had been a carrier current technician and interference locator for Black Hills Power and Light Company of Rapid City, South Dakota. I have just offered in writing to donate time and vehicle fuel to help Alliant Energy find these noise sources, though I did so verbally some years ago.

I have lived here ten years now and the noise keeps increasing. Even after a few days of rain that swells the fibers in the wooden poles and tightens the fitting of the hardware which lessens some minor arcs, other noises appear that were covered up. My receiver is first class: a Yaesu 1000D with extra filters; my antenna is average, a Hustler 5BTV ground mounted vertical with 23 buried radials and in good condition. These interfering noises have all been confirmed with a battery operated receiver, some 200 feet from any house wiring or appliances.

I thank you for your consideration in this matter, and am looking forward to hearing modest signals again.

Sincerely,

William D. Snyder, W0OF



WILLIAM D SNYDER
3951 SALLY DR NE
CEDAR RAPIDS IA 52402-2670



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✓

CEDAR RAPIDS, IOWA, BPL Trial System Radio Frequency Interference Tests

Sponsored by:

Cedar Rapids BPL Steering Committee
June 18, 2004

The Cedar Rapids, Iowa, BPL Steering Committee ("BPLSC") sponsored a series of tests to demonstrate the degree of radio frequency interference ("RFI") occurring to a licensed Amateur Radio station located near the BPL trial site of Alliant Energy.


For the Cedar Rapids BPL Steering Committee:

This report was prepared by:

✓ *G. Svetanoff* 6/18/2004

Denis G. Svetanoff, WASENA, Certified EMC Engineer, NARTE Certification #EMC-001549-NE

Reviewed by:

	<small>I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.</small>
	<i>Robert W. Walstrom</i> 6/18/2004
	Robert W. Walstrom
	My license renewal date is December 31, 2005.
	Pages or sheets covered by this seal: 1-18, 23-32

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